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Staff Trainning, Resources Utilisation And Institutional Quality Of Public Colleges Of Education In Oyo State

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***Abstract**: This study investigated the influence of staff training and resource utilisation on institutional quality in public Colleges of Education in Oyo State, Nigeria. The target population comprised 1,478 academic and non-academic staff from two colleges. Using a descriptive survey design, a sample of 315 staff was selected through stratified random sampling. Data were collected using three validated instruments and analyzed with descriptive statistics, Pearson correlation, and multiple regression. Findings revealed low levels of staff training and resource utilisation. Staff training had a strong positive relationship with institutional quality ($r = 0.762$, $p < 0.001$), while resource utilisation showed a moderate but significant relationship ($r = 0.398$, $p < 0.001$). Both variables jointly explained about 51% of the variance in institutional quality (Adjusted $R^2 = 0.512$). The study concludes that improved investment in staff training and resource utilisation is essential and recommends increased funding for training, ICT, and facilities.*

Keywords: Staff trainingt, Resource utilisation, Institutional quality, ICT capacity building.

Introduction

The responsibility for training qualified teachers primarily lies with Colleges of Education, among other institutions such as universities and polytechnics (Federal Republic of Nigeria, 2013) This underscore the importance of prioritising institutional quality among Colleges of Education. Institutional quality in Colleges of Education is a critical determinant of educational effectiveness, academic excellence, and graduate preparedness. It encompasses the standards of teaching, curriculum relevance, infrastructural adequacy, governance efficiency, and the ability of institutions to meet national and global benchmarks (Oni, 2020).

Institutional quality in Nigerian Colleges of Education has come under increasing scrutiny, particularly in light of national efforts to uplift teacher preparation standards. The mandate to produce competent 21st century teachers hinges on how well institutions meet accreditation benchmarks, maintain teaching standards, and uphold governance systems. Recent growth in student enrollment and structural reforms have not fully resolved persistent systemic weaknesses such as overcrowded classrooms, insufficient funding, and infrastructural decay indicating that institutional quality remains fragile and inconsistent across the state (Adefabi & Ajasa, 2020; Popoola & Melekeowei, 2025).

A critical driver of institutional quality is staff training. When lecturers receive regular training through mentoring, in-service workshops, ICT capacity building, and structured career orientation their pedagogical effectiveness and sense of institutional responsibility increase significantly (Wilson & Benard, 2024; Adelowo, 2015).

ICT capacity building among staff plays a vital role in improving institutional quality, especially in the context of Colleges of Education. When academic and non academic staff are adequately trained in modern ICT tools, they become more effective in teaching, research, and administration. This leads to enhanced service delivery, better curriculum implementation, and overall institutional performance. According to Okafor et al. (2022), ICT training enables educators to integrate digital technologies into pedagogy, thereby fostering student engagement and institutional competitiveness. In Colleges of Education, sustained ICT capacity building can bridge digital divides and equip staff with skills that align institutional operations with global standards (Adeoye & Afolabi, 2023).

In-service workshops significantly enhance institutional quality by continuously updating staff knowledge, skills, and pedagogical strategies. Regular professional training through workshops ensures that staff remain current with emerging trends in education, curriculum reforms, and instructional technologies. Eze, et al (2021) asserted that institutions that prioritizes in-service training witness higher staff morale, teaching effectiveness, and academic output. When such workshops are tailored to institutional goals, they create a ripple effect on student achievement, administrative efficiency, and academic standards, i.e the core elements of institutional quality (Salami & Ogunniyi, 2023).

Several studies have underscored the significant effect of staff training on institutional quality in higher education institutions. According to Gibbs & Kharouf, (2022), staff training, particularly through in-service training, workshops, seminars, and further academic qualifications, plays a crucial role in improving teaching effectiveness and administrative competence. The study emphasised that institutions that invest in the professional growth of their academic and non-academic staff often experience improved instructional delivery, enhanced curriculum implementation, and better student outcomes. This directly contributes to the overall institutional quality, as teaching and learning form the core activities in higher education.

Moreover, the utilisation of teaching and learning resources decisively shape academic outcomes. Quality libraries, functional laboratoris, ICT infrastructure, and modern teaching materials are essential for enriched classroom experiences. However, studies from Anambra and other states show that physical resources in many Colleges of Education fall short of the benchmarks prescribed by the NCCE, leading to underutilisation and poor educational delivery (Ejodini & Egwu, 2021; Uzoroh,et al, 2016).

Functional laboratories are critical determinants of institutional quality in teacher education. Laboratories serve as practical platforms for experiential learning, fostering the application of theoretical knowledge. Inadequate or non-functional laboratories hinder the development of relevant teaching competencies among student-teachers. As noted by Abubakar and Yusuf (2022), institutions with well equipped and regularly maintained laboratories experience better student outcomes and higher accreditation ratings. The presence of functional science, language, and vocational labs directly contributes to the production of well grounded graduates capable of meeting national educational needs (Oyeleke & Fagbemi, 2023).

Robust ICT infrastructure including internet access, computer labs, e-learning platforms, and multimedia tools greatly enhance the overall quality of educational institutions. ICT infrastructure supports modern teaching methods, enhances communication, and facilitates research and information sharing among staff and students. According to Nwachukwu and Chigbu (2021), the integration of digital infrastructure correlates positively with institutional visibility, academic reputation, and administrative effectiveness. In Oyo State Colleges of Education, the provision and maintenance of modern ICT facilities can uplift institutional standards, improve student learning experiences, and promote innovation in teaching and management (Ajani & Oyediran, 2022).

This work is based on system theory, systems theory views systems as holistic entities composed of interconnected components that interact and influence each other. It emphasizes the relationships and interactions between components, rather than focusing solely on individual parts. It was developed by Ludwig von Bertalanffy in the 1950s, Systems Theory views an organization (such as a college of education) as a system composed of interrelated and interdependent components.

Staff training, that is the human input subsystem, resource utilisation which the physical/material input subsystem, institutional quality which is the output in form of student performance, graduate competence, accreditation ratings, etc., quality assurance mechanisms, that is feedback/control loop. The theory suggests that if any part of the system is weak e.g., poorly trained staff or inadequate resources, the entire system's output which is the institutional quality suffers.

However, the interplay between staff training, resource utilisation, and institutional quality lies at the heart of teacher education in Oyo State. This study sought to bridge notable gaps the inconsistent nature of staff development provisions, misalignment of physical resources with NCCE standards, and weakened quality assurance systems in order to understand how these elements collectively influence educational outcomes.

Statement of the Problem

The quality of education produced by institutions of higher learning is fundamentally contingent upon the calibre of their staff and the adequacy of resources utilised to support teaching, learning, and research activities. Colleges of Education, as pivotal institutions in the training of future teachers, are expected to maintain high standards of institutional quality to produce competent and professionally equipped graduates capable of driving educational development at the basic levels. However, public Colleges of Education in Oyo State, like many similar institutions across Nigeria, appear to be grappling with a persistent decline in institutional quality, raising serious concerns about their capacity to fulfil their core mandate.

Institutional quality in Colleges of Education is broadly reflected in the competence and professional currency of academic staff, the utilisation of physical and instructional resources, the relevance of curricula, students' academic performance, and the overall learning environment. Despite the critical importance of these indicators, observable evidence suggests that public Colleges of Education in Oyo State continue to fall short of acceptable benchmarks in several of these dimensions. Classrooms remain overcrowded, libraries are poorly stocked with outdated materials, laboratories are either ill-equipped or non-functional, and instructional technology is largely absent from the teaching and learning process. These deficiencies collectively undermine the effectiveness of instruction and compromise the quality of graduates produced by these institutions.

These challenges call to question the sustainability of teacher education and their ability to produce competent, classroom ready graduates. Without strategic attention to staff development, resource provisioning, and internal quality systems, Colleges of Education in Oyo State risk compromising their foundational purpose which is preparing high quality teachers for national development. While several previous studies have explored aspects of staff development, resource availability, or institutional quality

in Nigerian higher education, many of these investigations have treated these elements in isolation or focused primarily on universities and polytechnics. There is a noticeable scarcity of empirical research that concurrently examines the interrelationship between staff development, resource adequacy, and institutional quality within the specific context of Colleges of Education, particularly in Oyo State. This study is therefore necessary to fill these critical gaps by offering a comprehensive, context specific analysis of how staff development practices and resource availability impact institutional quality in Colleges of Education in Oyo State.

Objectives

The main objective of this study was to examine the influence of staff training, resource utilisation on the institutional quality of public Colleges of Education in Oyo State. The specific objectives were to:

1. examine the level of staff training among academic and non academic staff in Colleges of Education in Oyo State.
2. examine the level of utilization of educational resources in public Colleges of Education in Oyo State.
3. examine the significant relationship between staff training and institutional quality in public Colleges of Education in Oyo State.
4. determine the relationship between resource utilisation and institutional quality in Colleges of Education in Oyo State and
5. examine the joint influence of staff training programme (in-service workshop and ICT capacity building) and resources utilisation (functional laboratory and ICT infrastructure) on institutional quality of public Colleges of Education in Oyo State.

Research Questions

1. What is the level of staff training among academic and non academic staff in public Colleges of Education in Oyo State?
2. What is the level of utilisation of educational resources (e.g., functional laboratories, ICT infrastructure,) public Colleges of Education in Oyo State.?

Hypotheses

$H_0$1: There is no significant relationship between staff training and institutional quality in public Colleges of Education in Oyo State.

$H_0$2: There is no significant relationship between resource utilisation and institutional quality in public Colleges of Education in Oyo State.

$H_0$3: There is no significant joint influence of staff training and resource utilisation on institutional quality in Colleges of Education in Oyo State.

Methodology

This study adopted a descriptive survey research design. This design is appropriate as it facilitates the collection of relevant data from a representative sample of staff members across the two selected Colleges of Education in Oyo State. The target population comprised academic and non-academic staff from two public Colleges of Education in Oyo State: Federal College of Education (Special), Oyo. academic staff: 573 non-academic staff: 649 making a total of: 1,222. Oyo State College of Education, Lanlate academic staff: 126 non-academic staff: 130 making a total of 256 with a grand total population of 1,478 staff members. A stratified random sampling technique was used to ensure fair representation of both academic and non-academic staff across the two institutions. The population was stratified based on staff category, academic and non- academic. Using a stratified sampling technique, a sample of 122 Academic Staff and 138 non-academic was selected from Federal College of Education (Special), Oyo : while 27 academic staff and 28 non-academic was selected from Oyo State College of Education, Lanlate. This made a total sample of 315 staff. Three self-developed instruments were created to measure staff training (STQ), resource utilisation (RUQ) and institutional quality (IQQ) among public Colleges of Education in Oyo state. Each of these instruments contained ten items and utilised a four-point Likert scale, including Strongly Agree, Agree, Disagree, and Strongly Disagree, to collect data for this study. The instrument was validated by experts in Educational Management and Measurement & Evaluation to ensure content and face validity.

To determine the reliability of the instrument, a pilot study was conducted using 30 academic and non-academic staff from a public College of Education in kwara State that was not included in the main study sample. The data collected were analyzed using

Cronbach's Alpha reliability coefficient method to determine internal consistency of the items with reliability coefficient of 0.82, 0.79 and 0.87 respectively for staff training (STQ), resource utilisation (RUQ) and institutional quality (IQQ). The data collected were analysed using both descriptive and inferential statistical techniques. Descriptive statistics, including mean, and standard deviation, were employed to address the research questions raised while inferential statistics, of pearson product moment correlation and multiple regression analysis, were applied to analyse data at 0.05 level of significance to evaluate the proposed hypotheses.

Results

The results were arranged according to the stated research questions and hypotheses as follows;

Research Question 1: What is the level of staff training among academic and non-academic staff in public Colleges of Education in Oyo State?

Table 1: Descriptive Statistics on staff training

S/N	Items	Mean	Std. Deviation
1	The institution regularly organizes in-service workshops for staff	2.13	.064
2	In-service training enhances my job performance.	2.12	.035
3	The content of workshops is relevant to my professional duties.	2.20	.067
4	I have attended at least one in-service workshop in the past year.	1.68	.047
5	The institution supports continuous professional development for staff..	1.94	.084
6	ICT training is regularly provided to improve staff digital competence.	1.65	.058
7	I feel more confident using ICT tools due to training provided.	2.03	.037
8	The institution includes ICT development in its staff training policy.	2.47	.075
9	ICT workshops address both basic and advanced technology use.	2.26	.074
10	Participation in ICT capacity-building programmes has improved my efficiency.	3.07	.073
	Weighted Mean	2.16	

The above table further revealed a weighted mean of 2.16 out of the maximum obtainable score of 4.00 which is lower than the standard mean of 2.5. This revealed that the level of staff training among academic and non-academic staff in public Colleges of Education in Oyo State was low.

Research Question 2: What is the level of utilisation of educational resources (e.g., functional laboratories, ICT infrastructure,) in public Colleges of Education of Oyo State.

Table 2: Descriptive Statistics on resource utilization

S/N	Items	Mean	Std. Deviation
11	The laboratories in my institution are adequately equipped for learning.	2.33	.067
12	Laboratory facilities are regularly maintained and updated.	2.08	.064
13	Practical laboratory sessions support theoretical teaching.	2.08	.039
14	The number of labs meets the academic needs of students and staff.	1.97	.045

15	Laboratories are accessible to staff when needed for academic purposes.	2.19	.094
16	ICT infrastructure (e.g., internet, computers) is adequate and accessible.	1.90	.047
17	Classrooms are equipped with modern ICT tools (e.g., projectors, smartboards).	1.97	.045
18	The institution ensures stable internet connectivity across departments.	1.89	.068
19	ICT infrastructure supports teaching, research, and administration.	1.93	.064
20	There is regular technical support for ICT-related challenges.	2.30	.056
	Weighted Mean	2.06	

The above table further revealed a weighted mean of 2.06 out of the maximum obtainable score of 4.00 which is lower than the standard mean of 2.5. This showed that the level of utilisation of educational resources in public Colleges of Education of Oyo State under study was also low.

Test of Hypotheses

H_{01}:There is no significant relationship between staff development and institutional quality in public Colleges of Education in Oyo State.

Table 3: Correlations on staff training and institutional quality

		Staff Traning	Institutional Quality
Staff Training	Pearson Correlation	1	.762**
	Sig. (2-tailed)		.000
	N	315	150
Institutional Quality	Pearson Correlation	.762**	1
	Sig. (2-tailed)	.000	
	N	315	150

The table above revealed that there is a positive significant relationship (0.762) relationship between staff training and institutional quality in public Colleges of Education in Oyo State. Therefore we reject the null hypothesis.

H_{02}:There is no significant relationship between resource utilisation and institutional quality in public Colleges of Education in Oyo State.

Table 4: Correlations on resource utilisation and institutional quality

		Resource Utilisation	Institutional Quality
Resource Utilisation	Pearson Correlation	1	.398**
	Sig. (2-tailed)		.000
	N	315	150
Institutional Quality	Pearson Correlation	.398**	1
	Sig. (2-tailed)	.000	
	N	315	150

The table above revealed that there is a significant relationship (0.398) between resource availability and institutional quality in public Colleges of Education in Oyo State. Therefore we reject the null hypothesis

$H_0$3: There is no significant joint influence of staff training and resource utilisation on institutional quality in Colleges of Education in Oyo State.

Table 5: Summary of Multiple Regression Analysis Showing the Joint Influence of Staff Training and Resource Utilisation on Institutional Quality in Colleges of Education in Oyo State

Sources of Variance	Sum of Square	Df	Mean square	F	Significant

REGRESSION	3860.216	2	1930.108	519.82	0.000 [b]
RESIDUE	1162.164	313	3.713		
TOTAL	5022.380	315			
R = 0.609[a] R Square = 0.514 Adjusted R Square = 0.512 Std. Error of the Estimate = 2.232					

a. Dependent Variable:Institutional Quality
b. Predictors: (Constant), Staff Development, Resource Availability

The table 5 indicated that the joint influence of staff training and resource utilization on institutional quality in Colleges of Education in Oyo State ($F_{(2,313)} = 519.82$; Adj $R^2 = 0.512$; $p<0.05$). This implied that when staff training and resource utilisation were taken together, they jointly predict institutional quality. The table further revealed that multiple regression coefficient (R = 0.609) and multiple regression adjusted ($R^2 = 0.514$). This indicated that 51% of the variation in institutional quality in Colleges of Education in Oyo State was accounted for by the combine contribution of staff training and resource utilisation while the remaining 49% is due to other factors and residualed not in this model.

Discussion

The descriptive analysis in table 1 revealed a weighted mean score of 2.16 out of a maximum of 4.00, which fell below the standard mean benchmark of 2.50. This finding indicated that the level of staff training among academic and non-academic staff in the sampled institutions was low. Across the ten items measuring in-service workshops and ICT capacity building, most items recorded means below 2.5, (mean = 1.65) and (mean = 1.68). These scores suggested that formal, regular staff training is largely infrequent or inaccessible in Oyo State Colleges of Education.

The only item scoring above the standard mean was (mean = 3.07), implying that when training is made available, staff acknowledge its positive impact on their productivity. This contradicts the low availability scores and further underscores the urgency of expanding training provision. These results align with earlier findings by Adelowo (2015) and Wilson & Benard (2024), who noted that irregular staff training programmes impair pedagogical effectiveness and weaken institutional commitment.

Table 2 showed a weighted mean score of 2.06 out of 4.00 for resource utilisation, again falling below the standard mean of 2.50. This indicated that the level of utilization of educational resources (functional laboratories and ICT infrastructure) in the studied institutions was also low. Items measuring ICT infrastructure were particularly concerning, with "The institution ensured stable internet connectivity across departments" (mean = 1.89) and "ICT infrastructure is adequate and accessible" (mean = 1.90) recording the lowest scores.

The Pearson correlation analysis in table 3 yielded a coefficient of $r = 0.762$ ($p < 0.001$), indicating a strong positive and statistically significant relationship between staff training and institutional quality. The null hypothesis (H_{01}) was therefore rejected. This result confirmed that improvements in staff training including in-service workshops and ICT capacity building are closely linked to enhancements in institutional quality across dimensions of service delivery, administrative efficiency, and educational outcomes.

This finding is consistent with the positions of Gibbs and Kharouf (2022), who demonstrated that institutions investing in professional growth of staff typically experience improved instructional delivery and curriculum implementation. Similarly, Eze, et al (2021) noted that regular in-service training leads to higher staff morale, teaching effectiveness, and academic output. The strong correlation underscores that staff training is not merely a peripheral concern but a central driver of institutional quality in Colleges of Education.

Table 4 revealed a Pearson correlation coefficient of $r = 0.398$ ($p < 0.001$) between resource utilisation and institutional quality. While this is a statistically significant relationship, the moderate correlation coefficient suggested a weaker, though meaningful, association compared to staff training. The null hypothesis (H_{02}) was rejected. This finding indicated that the utilisation of functional laboratories and ICT infrastructure is positively, albeit moderately, related to institutional quality outcomes. As Abubakar and Yusuf (2022) noted, well-equipped and regularly maintained laboratories are necessary for higher accreditation ratings and better student outcomes. The data from this study suggest that while respondents acknowledged the importance of resources, the actual quality and functionality of available resources in these institutions are insufficient to produce strong quality outcomes.

The multiple regression analysis in table 5 revealed a significant joint influence of staff training and resource utilisation on institutional quality ($F(2,313) = 519.82$; Adjusted $R^2 = 0.512$; $p < 0.05$). The null hypothesis three was therefore rejected. The multiple regression coefficient (R = 0.609) indicated a moderate-to-strong combined predictive relationship, while the adjusted R^2 of 0.512 showed that approximately 51% of the variance in institutional quality is jointly explained by staff trainig and resource

utilisation. The remaining 49% of variation is attributable to other factors not captured in this model, such as governance structures, funding levels, administrative leadership, and quality assurance mechanisms.

The significance of the F-statistic (519.82) is especially noteworthy and demonstrated the robustness of the model. It confirmed that the predictive model is statistically sound and that policy interventions targeting both staff training and resource utilization simultaneously are likely to yield more substantial improvements in institutional quality than addressing either factor in isolation.

Conclusion

This study set out to examine the influence of staff trainig and resource utilisation on institutional quality in public Colleges of Education in Oyo State. Drawing on a sample of 315 academic and non-academic staff and employing descriptive and inferential statistics, the study generated findings that are both illuminating and cause for concern. In conclusion, the evidence from this study strongly indicated that unless deliberate, sustained, and coordinated investments are made in staff training and educational resource utilisation, the Colleges of Education in Oyo State will continue to fall short of national accreditation standards and fail to produce the calibre of graduates needed for Nigeria's evolving educational demands. The institutions examined are at a critical juncture, and the path forward requires both policy commitment and institutional willingness to embrace systemic reform.

Recommendation

Based on the findings of the study, it is recommended that college management and relevant government agencies institutionalize regular and structured staff development programmes as a core institutional policy. Annual training calendars covering workshops, seminars, conferences, and opportunities for further academic qualification should be established, with dedicated and protected funding to ensure sustainability.

There is an urgent need to expand ICT capacity-building programmes for both academic and non-academic staff, particularly in view of the low level of ICT training identified in the study. Colleges should collaborate with government agencies and technology partners to provide continuous digital literacy and instructional technology training.

Government and relevant intervention bodies should increase funding for the provision, rehabilitation, and maintenance of laboratory facilities and ICT infrastructure, while institutions should also explore alternative funding sources such as partnerships, grants, and alumni support to complement public funding.

College authorities should prioritize the maintenance and functionality of existing facilities by establishing effective maintenance systems that ensure continuous access to laboratories and ICT resources in line with minimum regulatory standards. Stable internet connectivity and modern classroom instructional technologies should be strengthened across departments to enhance teaching effectiveness, research productivity, and administrative efficiency.

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